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AUTHOR	Butler, Erik Payne; Bailis, Lawrence Neil
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ABSTRACT

The roles of assessment and testing within public employment and training programs supported by the Job Training Partnership Act of 1982 (JTPA) were examined through a review of the literature and two surveys of the JTPA system. In 1987, the Center for Remediation Design and the Center for Human Resources (CHS) at Brandeis University in Waltham (Massachusetts) collaborated to interview managers in 150 service delivery areas (SDAs) that focused on basic skills testing. In 1988, CHS staff conducted additional interviews with about 100 SDAs and 12 states. Eliminating duplications and combining surveys yielded 206 surveys, with 176 usable responses. Additional interviews were conducted with experienced state and local practitioners. A very high proportion (92%) of JTPA SDAs used formal testing. The JTPA system has recognized many of the shortcomings of standardized tests, especially language or cultural biases that are often relevant to minority applicants and clients. The trend toward basic skills education in job training is acknowledged in the purposes for which tests are used. Among JTPA testing professionals, there is a new appreciation of the utility of combining test results and other forms of assessment, with the use of objective tests to complement, and not replace, the professional judgments of well-trained staff. Statistical data are presented in three tables. A 47-item list of references are included. (SLD)

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Testing and Assessment in Publicly-Supported Job Training for the Disadvantaged

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Prepared for:

The National Commission
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Prepared by:

Erik Payne Butler
Lawrence Neil Bailis

The Center for Human Resources
Brandeis University

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> **There's an old Army saying, "If it moves, salute it." Today, some reformers seem to be saying, "If it moves, test it."**
>
> **--Statement attributed to Gregory Anrig by Edward Fiske**

1.0 Introduction

Americans have mixed feelings about tests. We fear taking them, we often don't like their results, but we keep using them. At times, seeking objectivity, we urge still more testing in our search for ways to overcome favoritism and discrimination in education, in employment, and a variety of other fields. At other times, we admit that the tests we use have biases and flaws, and our concern shifts to over-use and mis-use. And still we use them. Today the pendulum seems to be swinging towards our fearful side. Dean Bernard Gifford of the Graduate School of Education at the University of California at Berkeley, who chaired the Commission for which this paper is prepared, has recently referred to a "stampede to more and more testing" and concluded that "there is increasing evidence of over-reliance on ... test scores in making educational, training, and employment decisions."

As usual, there is something to be said for both sides of the argument. Most likely, we need to be able to find ways to define and then occupy the middle ground - - on one hand, improving the validity of the tests we use and making appropriate use of the information we get from them, and on the other hand, cutting back upon or eliminating tests of questionable predictive validity. The question is how can this be done?

The National Commission on Testing and Public Policy is examining this issue from a variety of different perspectives. This paper has been prepared to contribute to this broad-ranging review by summarizing the experience with assessment and testing in public employment and training programs. We begin with an overview of the Job Training Partnership Act of 1982 (JTPA), and of the roles that assessment and testing are said to play within programs supported by JTPA. Subsequent sections blend subjective and objective evidence from three cycles of telephone interview and from experience to discuss the actual uses of testing and assessment in JTPA. The most significant current trend in employment training - an emerging "basic skills" movement - receives separate treatment from a testing and assessment point of view. The final section draws the implications of these experiences both for employment and training programs and for broader concerns of public policy.

2.0 The Approach Taken by this Paper

The perspectives underlying this paper draw primarily from nearly forty cumulative years (we are two people, of only middling years) of personal experience with public and private employment programs, including JTPA and its predecessor employment and training programs (many of which were funded by the Comprehensive Employment and Training Act -- CETA, the Manpower Development and Training Act--MDTA, and the Economic Opportunity Act--EOA). However, it is also based on a review of the leading studies on JTPA implementation and two surveys of the JTPA system.

In 1987, the Center for Remediation Design and the Center for Human Resources at Brandeis University collaborated to interview managers in 150 "Service Delivery Areas" (SDAs) that focused on basic skills testing. In 1988, Center for Human Resources staff undertook interviews of nearly 100 SDAs and twelve states to gather data on which to base this paper. We also conducted a series of free-ranging interviews with a sampling of experienced state and local practitioners.

The 1987 questionnaire was conducted with people chosen by a probability sample consisting of every third SDA on an alphabetized list, and can thus be generalized to all SDAs with a reasonable degree of certainty.[1] The interviews that were conducted during 1988 were designed to ascertain the extent of use of certain

[1]The study began with a sample of 205 and had a 73.2% response rate yielding a total of 150 usable responses from employment and training planners and managers.

practices in the field, and to solicit the opinions of local and state officials about their evolution and meaning. Given this focus on informed opinion, the survey utilized a purposive sample of about 100 SDAs, including those whose leadership was known to us as well as a random sample; given this sampling strategy, one cannot assume that the sample is representative should not extrapolate the proportions in our findings to all SDAs. Moreover, parts of the 1988 survey were open-ended, the questions searching more for the current opinions more than proof of numbers, and the analysis of the results has been only crudely statistical.

In several places, we have reanalyzed and incorporated the results of the 1987 survey with the findings of the 1988 study. While the 1987 survey was focused specifically on basic skills testing, many of the responses yielded data which related directly to the subject of this paper.

At times, we have taken some license and combined the results on similar items in the two surveys, eliminating the 47 interviews from the 1987 survey which duplicated the SDA's among the 100 surveyed in 1988.

But despite all of this statistical manipulation, both the conclusions drawn from these surveys and conversations, and the implications that are drawn for the broader frame of public policies in testing are our own. As noted earlier, this is primarily a personal review, written by two people who have worked in or with CETA at the federal and local levels, participated in the planning for JTPA, and watched JTPA's implementation closely and performed evaluation and policy research during both eras.

Our perspective is both supported and tempered by the work of our own organization, the Center for Human Resources at Brandeis University, with assessment-driven and competency-based employment programs for the disadvantaged clients, and by the work we have done on this issue with the Department of Labor, the National Governors Association, the National Commission on Employment Policy, and other groups.

3.0 Overview of the Job Training Partnership Act

When the Job Training Partnership Act was passed with some fanfare in 1982, it culminated a considerable bi-partisan policy salvage job. The new federal Administration exhibited little real interest in job training for the disadvantaged, and based its skepticism on the well-publicized difficulties of the Comprehensive Employment and Training Act. CETA had peaked in annual budget at over $12 Billion in 1979, and had -- for reasons principally of bad management and unlucky public relations almost from its beginning in 1974 -- become a favorite whipping boy of critics of "social programs".

The new Administration, looking for opportunities to cut programs from the budget, first drastically cut CETA's budget, then opposed its renewal when it expired in 1981. However, there was clear support for doing something in employment and training to replace CETA among both parties, in both branches of Congress. Thus, by mid 1982 Administration support began to appear for a bipartisan formulation known as the Job Training Partnership Act.

The elements of this formulation -- reflected in the bill which was finally passed signed in October, 1982 -- included elimination of public service employment and most forms of subsidized work experience, the elevation of the role of the private sector through Private Industry Councils, increased authority for the states, and a variety of measures designed to promote more rigorous, less expensively administered, results-oriented management.

Coupling these elements together with a reduced budget request (less than $4 billion) made it possible to sell JTPA as a lean, mean, training-oriented, anti-make-work, pro-business, bottom-line driven initiative in the spirit of public-private partnership. This was not "son of CETA", but a more distant relative. And so it has been in implementation.

Despite predictable inertia at all levels, from the U.S. Department of Labor through local Service Delivery Areas, JTPA -- now in its seventh year, but only fifth of full-scale implementation -- has developed into quite a different employment and training system from its predecessor. States have become major players, often at the expense of local governments, which were firmly in charge during CETA. The federal Department of Labor spent the first several years of JTPA's existence avoiding any meaningful programmatic role at all, short of toting up results, and most states were perfectly willing to pick up the slack. While the organized private sector is hardly in the driver's seat envisaged by some, certainly many more private employers are involved in JTPA than were during CETA. Aside from the drastic reduction in budget,

which has had the most dramatic impact, the institutional and political changes which have followed are, in some ways, the more noticeable.

Quieter, less noticed still, but in some ways even more significant, are the changes in program and management practices which have resulted from JTPA's provisions calling for more outcome-oriented accountability -- notably the requirement that Governors monitor the performance of SDAs against certain outcome standards. CETA was heavily procedural, that is focused on participatory requirements for "significant population segments", targeting devices, and slot levels -- and almost before it got started it got burdened additionally with such confusing priorities as "public service employment for countercyclical economic stimulation", an administrative and public relations disaster.

JTPA, on the other hand, has been almost fanatically outcome-driven, and both Administration and Congress have, remembering CETA, strongly resisted "confusing" amendments even when technical and even programmatic adjustments were badly needed.

The most significant outcome-oriented practice has been the development of formal national, state, and locally-administered systems of outcome measures, and standards for aggregated program achievement. This so-called "performance standard" system -- driven by a nationally-derived set of outcome numbers against which the performance of local administrative entities, called Service Delivery Areas, or SDAs, (and, in turn, states) are measured, have become the basis for judgement about the

effectiveness of local programs, and, when they are aggregated, about the system as a whole. This rigorously-applied set of measures and standards has had the effect of turning the system on its head to comply. The measures have recently been expanded, and there have been annual adjustments in the standards, but in general there has been great consistency over the several years of JTPA, providing a good basis of experience with outcome measures for a national program.

Two other practices that have evolved over the several years of full implementation of JTPA have either hardened or mitigated the impact of the performance standard system, and have created a new environment for assessment and testing practices in the field. The first is a set of approaches to "performance-based contracting" which, while not mandated -- or even mentioned -- by JTPA, has quite literally swept the system in the last three years. The second practice, authorized by JTPA, but little emphasized by the performance standard system in the first few years, is the development of competency measures for program outcomes. To some extent, the movement in JTPA towards competency measures, and in turn to competency-oriented training, though specifically authorized only for youth, has been a reaction against the existing performance standard system, which has emphasized job placement over other outcomes.

The drive for measurement and accountability in JTPA has had a gradual but over time dramatic effect on the system's collective thinking about program services, and in turn about the uses of both informal assessment and formal testing. As

statewide systems and local programs are called upon to measure and document their aggregate accomplishments, program managers are in turn pressed to better measure individual accomplishments.

As we will suggest later in this paper, the actual uses of assessment and testing results vary greatly from city to city and even state to state, but the extent of use of these techniques has grown considerably over the past five years. Though it is difficult to document on a large scale, most of the people to whom we talked this past summer confirm our own impressions: that whereas ten years ago most assessment in federally funded employment and training programs was done in a structured intake interview, much more reliance is now placed on results of formal testing. Thus, while the proportion of local entities which claim to do some form of assessment at program entry has remained relatively constant, the mix between personal assessment and formal testing has changed significantly.

4.0 Scope and Extent of Testing and Assessment Use in JTPA

While there are "set asides" for the economically or educationally disadvantaged in various other publicly supported training and education programs, the Job Training Partnership Act has been the single largest program dedicated to providing job training services to this population. Fully operational in October 1983, it has been funded on a program year basis running from July 1st through June 30 each year. Total appropriations have ranged from $ 3.3 billion to $ 3.9 billion over the last several

years. JTPA training services are provided to displaced workers and to economically disadvantaged youth and adults.

On average, just over 1,000,000 different individuals have received training each year in the primary training programs of JTPA (Title II-A), with just fewer than half of them being 21 years old and younger. In addition, approximately 700,000 additional young people (under age 22) participate in the large, six - eight week long, summer jobs program (Title II-B). For purposes of our current discussion, the reader should understand that a very high proportion of the million plus persons participating in training are tested or assessed in some formal way. A much smaller, but growing, proportion of young people participating in the summer jobs program are also tested or assessed formally.

Exhibit 1 on the following page combines the results of our 1987 and 1988 surveys on testing and assessment to indicate the overall extent of the use of testing and assessment methodologies in JTPA. As is made clear by the exhibit, the vast majority of SDAs use at least some form of assessment, and roughly two-thirds of them combine intake interviews with formal tests. (These proportions apply principally to the main JTPA Title IIA training programs.)

Exhibit 1

EXTENT OF USE OF TESTING AND ASSESSMENT IN JTPA*.

RESPONSE	#	PROPORTION
Use any method of assessment	164	93.2%
Use intake interview only	32	18.2%
Use formal test only	24	13.6%
Use both in combination/series	120	68.2%

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* Combined results of 1987 and 1988 telephone surveys of 206 (non-duplicates) Service Delivery Areas (150 in August 1987; 105 in July 1988, less 47 duplications) usable responses on these questions: 176.

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Exhibit 2 reflects the decisions that local practitioners are making about which programs are appropriate for formal testing methodologies. Roughly three-quarters of the respondents used formal tests for their adult classroom training programs, including about half of the SDAs who report using such tests for call classroom training. (As indicated in the note, these are proportions of the total of just over 80% of respondents who report using formal testing either by itself or in combination with informal techniques in an intake interview.)

Exhibit 2

DIFFERENT PROGRAM TYPES IN WHICH FORMAL TESTS ARE USED.*

	#	PROPORTION
Use formal testing for all clients in all programs	29	20.1%
Use testing for adult classroom training participants only	42	29.2%
Use testing for adult and youth classroom training participants only	73	50.7%

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* Combined results of 1987 and 1988 Brandeis surveys (less duplicated SDAs). Usable responses: 144. Proportions are calculated as percentage of respondents who report using tests alone or in combination with other methods).

In summary, a very high proportion of JTPA SDA's are using formal testing, and nearly every one uses some organized method of assessment or testing. As a result, nearly a million economically disadvantaged JTPA participants are participating in some organized form of assessment, usually through formal testing at program enrollment, often again subsequent to program participation.

5.0 The Purposes for which Testing is used in JTPA

The 600-plus Service Delivery Areas in JTPA have used standardized testing for at least five distinct purposes: (a) screening eligible applicants in or out of the program; (b) career planning, matching participants with job openings and/or assisting with job development; (c) assigning people to different components of the program; (d) monitoring progress of individuals; and (e) assessing aggregate and individual program impact. Exhibit 3 suggests the proportion of SDAs using testing for each function. Each application is then discussed in the pages which follow.

Exhibit 3

REPORTED PRINCIPAL PURPOSES OF ASSESSMENT AND TESTING*

Purpose	#	Proportion
Program Intake (screening in or out)	29	45.3%
Career Planning/Employability Development Planning/Job Development	56	87.5%
Assigning People to Different Program Components	57	89.1%
Monitoring Client Progress	32	50.0%
Assessing Program Impact	39	60.9%

* Source: Telephone survey conducted by Brandeis University staff in the summer of 1988 with 64 usable responses on this item. (Note: Since these questions were not asked in the 1987 survey, we present data only from the later survey.)

5.1 Screening Eligible Applicants Into or Out of the Program

> **Each job training plan shall provide employment and training opportunities to those who can benefit from, and who are most in need of, such opportunities.**
>
> **Job Training Partnership Act (PL 97-300, Sec. 14 (c))**

JTPA appropriations have never been sufficient to meet the needs of more than a small fraction of those who meet the income eligibility requirements for participation in the program, leaving SDAs to rely upon the only the most general guidance in their efforts to decide whom to serve. Sandell and Rupp (1988), suggest that the intent of the JTPA legislation was to provide maximum local flexibility in participant selection. Many SDAs have chosen to use objective tests and other assessment techniques as tools to help to decide which eligibles will actually get in the door, often by setting minimum literacy standards and using standardized testing to determine which clients meet the standards.

Ostensibly, these tests are used to determine which eligible applicants can be helped the most by the program. As one survey respondent put it, "We have too little money; we have to target our pittance on people who can really benefit from it. Testing arms us with better information about which clients can succeed, so we depend on it heavily." (Brandeis interview, 1988).

The "targeting" argument for testing is a double-edged sword. Not surprisingly, it is often alleged that tests are used for perverse purposes, especially "creaming", i.e., favoring easier-to-serve clients in lieu of those in greatest need among the eligible population (surely a tempting practice for programs which must meet numerical standards for job placement and cost).

Most of the respondents to our survey of SDAs (say that they) do not believe that the assessment and testing that they do at program intake contributes to creaming. However, there were wide variations among programs in the proportion who thought that assessment and testing did or might have an influence, ranging from 19.2% for the JTPA dislocated worker programs to 47.1% for adult training programs. (Brandeis Interviews, 1988)

Given the fact that "creaming" is a dirty word in the JTPA lexicon, it seems likely that the reported estimates of this effect are underestimates, and we conclude that at least some of the assessment and testing approaches used in JTPA do tend to have "screening out" effects, especially in programs most held accountable to stringent cost and placement standards. Unfortunately, aside from our own opinions and those of the people we interviewed, the real extent of this practice is impossible to gauge because there are no objectively reliable data.

Several points seem important to a full understanding of the role of standardized testing in the screening process for JTPA eligible applicants. The first is that it is not which tests are used, but the way any test is used. For example, if an SDA imposes

minimum literacy thresholds for acceptance into the overall program or specific training courses, then the application of test data has the effect of reducing training opportunity. And it appears clear that that phenomenon occurs with some frequency.

The impact of these tests obviously depends what is done with them. At times, those who fall below certain standards are simply denied entrance to the program. But our survey also revealed instances in which those who fall below those threshold are referred to remediation programs run by other agencies or schools or colleges. One SDA described a practice by which applicants who are within one and a half grade levels of the minimum entrance requirements for reading remain with JTPA for a brief remediation program, while those who are further behind are referred out to other agencies. Since there is evidently much attrition during or after this referral (some people simply never return), this process amounts to a negative screen for those with lower educational attainment. (Brandeis interviews, 1988)

But strikingly, as many SDAs seem to be using test scores to "screen people in" as Sticht (1980) would use the phrase, rather than the opposite. Several SDAs in our survey told us about efforts to eliminate applicants whose test scores were too high since they felt that they had less need for JTPA summer or year round programs.

To be sure, tests can also have other unintended results. For example, there is widespread testimony to support the belief that the mere existence of objective tests at program intake screens out people who are unwilling to go through the testing process. Several SDA officials claim that tests discourage people from enrollment because they

make the process long and cumbersome. Even more importantly, managers perceive that large numbers of potential JTPA participants are reluctant to be tested at all, apparently bearing apprehensions that come from a lifetime of doing poorly on standardized tests.[2]

5.2 Career Development and Planning

Most of the SDAs we interviewed told us that they use objective tests as part of their efforts to determine which services a program participant needs and to plan the kinds of outcomes for that participant that are both desirable and likely. One official told us, "the use of standardized tests provides us a more complete picture of the participant than is otherwise possible. We can tell which program he or she needs, and assign them properly". (Brandeis Interview, 1988)

Most of the SDA people we interviewed thought that the most effective assessments employ a combination of standardized tests and more subjective data, usually from intake interviews. One SDA official told us that his assessment staff start with a client's own expressed desires, and then "if the person's interests aren't compatible with the test results, we suggest, an alternative path. We couldn't do that with an interview alone or a test alone: we need both". (Brandeis Interview, 1988)

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[2]In several of the SDAs, officials indicated that clients that have failed in school or have been out of school a long time are fearful of situations that involve paper and pencil test taking. An Alaskan SDA official told us that these kinds of people would "rather be fishing". While that may be literally true in that part of the country, it is undoubtedly figuratively true throughout the system.

On the other hand, many employment and training professionals are skeptical about the ability of any standardized test to realistically assess job readiness and other key elements that go into an employability development plan. This has led some practitioners to try some awkward and expensive alternatives to testing. A number of the welfare employment programs of the past decade have, for example, opted to put all participants through training in job searching as an initial screen rather than use objective tests. While this hands-on method may work better than a test to determine which clients will need additional skills training, it does so at a relatively high emotional cost to the client who fails to get a job (we are, after all, going through this program as assessment), and at a high real cost to the program, since the training will have to be repeated for many clients when they are ready to it. Yet this is an understandable impulse, in a field in which there is considerable mismatch between information needed for responsible training development and what is available from most standardized testing. Nevertheless, it violates the cardinal rule: "assess only for what you need to know, and use all that you get".

Assessment issues in JTPA received extensive attention during 1988 in a series of two-day training institutes on summer enrichment training institutes (SETIs) for state and local practitioners that were conducted by our Center for Human Resources here at Brandeis, as well as in a series of two-day "institutes" on basic skills assessments conducted by Brandeis in conjunction with the Center for Remediation design. Despite

the fact that more than 1200 practitioners were involved, some real consensus emerged from these discussions. They confirm the impressions drawn from our surveys:

- There is no one current test that covers all types of assessment needed in youth employment and training programs;

- Formal, objective tests may be necessary; but they are not a sufficient way to assess skills. Interviews and documents such as application forms and writing samples can provide good initial assessment information, and are needed in almost every case.

- The utility of assessments in career planning, development of employability development plans, and assigning participants to various educational and training components is enhanced when the tests are made understandable and meaningful to clients, i.e., when trainees know why they are being tested, what their score are, what they mean, and how they relate to program and curriculum goals.

- Information needs to be gathered from all available sources. For example, an effective assessment system for youth may combine school-derived data from records and with employment and training results into a comprehensive system which can be used both by schools and training agencies.

If anything, we expect to see even more emphasis on the uses of tests for this purpose in the JTPA system in the future. A thirty-eight member national advisory committee to the Department of Labor stressed the need for an enhanced role for assessment in its final report, issued in March, 1989. Three of its headlined recommendations for the field are relevant to this discussion:

> Every JTPA program should provide a diagnostic assessment and assignment process and a mix of services individualized to address participant needs...
>
> Only after participant's work history, job and educational skills, interests, *** health, motivation and life circumstances are reviewed and documented, can they be used to establish the services individuals should receive and their obligations while receiving these services....

States and local programs need to pay greater attention to the criteria by which applicants are assigned to services and should collaborate on developing assessment tools that serve similar clients with multiple program needs...

5.3 Matching Services to Client Needs

JTPA programs offer a wide variety of services to participants - ranging from short-term efforts to help people learn to look for jobs, through short and long term vocational skills training in classroom settings and on-the-job training efforts. Standardized tests and related assessment procedures are often used to help decide which services are most appropriate for each client. (This use of tests is closely related to the above-described use of tests to develop career plans.)

For the most part, SDA officials described growing reliance on the use of standardized tests for this purpose. One of them told us that a "complete battery of testing and assessment instruments" was necessary in order to allow program staff to properly match the client with the applicable training programs, and another noted that "academic and aptitude testing" has led to a higher proportion of those entering classroom training programs actually completing them. She was reluctant to conclude that this was due to higher entry standards, arguing instead that it allowed "better matching" (Brandeis Interview, 1988).

Another SDA official told us that standardized tests were used to establish thresholds for the reading ability necessary to succeed in specific skills training programs: "Some clients simply can't handle the reading requirements for some of our programs; the tests help us make sure that none is put into a position where he or she

can't succeed" (Brandeis Interview, 1988). When properly done, this kind of screening is greatly valued by the agencies that have subcontracts with SDAs to actually deliver the training.

Several SDA respondents cited a practical implementation dilemma, which characterized most large and middle-sized city systems. Simply put, the question is: who does the assessment in a subcontract-based system? Traditionally, when assessment was more informal, and part of an intake interview, the agencies who actually delivered services performed the assessment. As one person put it, "This system meant that the assessment results were always skewed in the direction of services that agency provided itself. So you got a situation where client A applies for job training at Agency X. Agency X offers clerical training for girls and automotive training for boys. So, practically speaking, no matter what the assessment really says, the message is: 'if you're male, you are offered automotive training - whether you need it or not'" (Brandeis Interview, 1988).

As more formal testing is introduced, there has been growing tension between centralizing assessment to use it for referring to appropriate subcontract agencies and the wish by subcontractors to do their own testing, thereby, assuring themselves of appropriate enrollees. Informal bureaucratic considerations such as these can have a larger role than the specific nature of a test or the stated policies about the use of test results in frustrating attempts to use client information to match services to individual needs.

5.4 Monitoring and Measuring Progress of Participants in Training Programs

While most testing in employment and training is done at intake, and applied to the purposes described earlier in this paper, there is a growing body of experience with using both formal and informal means to assess in-program progress of individuals. The term "benchmarking" has come into common use on job training to describe the process by which interim progress points are identified and some form of assessment -- usually informal, only rarely formal testing -- is used to determine whether a participant has reached a certain progress point, or benchmark. Two systems, however are increasingly being used in the field for this purpose. The Comprehensive Competencies Program, developed by Robert Taggart, the former Administrator of the Office of Youth Programs in the Department of Labor, integrates pre- and post-tests and benchmark measures into an elaborate computer-managed basic skills instructional program now being used in over 300 local programs. CCP's various unit and level tests provide ongoing information on student progress, and is actually used in most programs more for instruction than for assessment.

A second system, the Comprehensive Student Assessment System (CASAS), also offers a system of assessment and benchmarking to show progress of learning. CASAS employs criterion-referenced tests, drawn from an extensive pool of test items designed for the purpose, to measure specific employability skilled, to locate students and measure their progress along a continuum of basic educational skills. Through the work of the so-called "project of the states", developed by the Center for Remediation

Design, as well as through work by Brandeis and others, CASAS is now developing customized assessment and curriculum management systems for JTPA practitioners in more than fourteen states.

Our interviews last summer revealed extensive use of interim measures, but a surprising description of their purposes. Beyond CCP and CASAS, only a smattering of programs appear to use this approach in conjunction with formal testing mechanisms in order to serve clients better. Many local SDA administrators do, however, report using interim progress measures of some sort as part of their contracting system, enabling them to make progress payments to subcontractors.

This may be because program managers are relatively well-satisfied with what they have. Several of them, in our interviews could not resist the nostrum, "if it ain't broke, don't fix it" in response to questions about whether they were considering introducing more ambitious in-program measurement. Fully 82% were convinced that what they presently did (typically pre- and post-program assessment adequately meet the needs of clients and 87% reported that they were more interested in the kinds of interim measures which met their own management information needs about contractor performance. (Brandeis surveys, 1988).

The slow growth of the practice of "benchmarking" offers insight which confirms our instincts about the use of testing in JTPA. It appears that the willingness to look for interim measures of client accomplishment has been spurred in the past three or so years by the demands to make progress payments to subcontractors operating on

performance contracts than by educational concerns for measuring competency-development progress (Brandeis Interview, 1988). But why the movement to pre- and post tests? It appears to be born of the same cause. Simply put, the JTPA regulations require it, and SDAs are obliged to employ the practice to determine their contractor payments.

This has been an interesting development, revealed most clearly for us in the interviews of the past two years. It is worth setting some context here, to better understand these developments. Essentially, there are two trends, which began as program innovation, and have evolved into management practice, with their actual program service purposes taking a back seat. Let us discuss these two issues -- interim progress measurement or "benchmarking", and end-of-program competency measurements -- separately, for each has come to employ assessment and testing for different purposes and in a different way.

The development of "benchmarking" began in the Job Corps programs of the late 1970's and hit its peak with the Comprehensive Youth Employment Program demonstration sponsored by the U.S. Department of Labor from 1979 to 1981. Borrowing heavily from the competency based education movement, this set of more than a dozen federally supported pilot programs attempted to break down learning into bite size pieces, completion of each to be measured by some acceptable form of assessment, meanwhile linking training and work experience with education and supportive services. It was argued by those who helped to design the initiative (see for

example Fiala, 1982) that each individual participating in a job training program should have an employability development plan which was build around several elements:

- Assessment of client interests aptitudes and vocational goals;
- An Employability Development Plan (EDP) in which assessment data and client counselor interviews determine types of services and training a client should receive;
- Instruction based on the service needs specified in the EDP;
- Reassessment (measurement) to determine whether and to what extent the client has successfully completed a particular activity, and review of the EDP, and replanning;
- Documentation based on a formal system to collect, analyze and report accurate data on each individual client; and
- Evaluation of client and program data to determine both program and individual accomplishment.

The idea, essentially, was to do for disadvantaged participants in job training programs what the Individual Educational Plan (IEP) and Individual Written Rehabilitation Plan (IWRP) have arguably done for special needs students and Americans with disabilities respectively. Each participant in publicly supported job training would have, by this scenario, a vocational outcome objective (i.e., a job) and would be working on an individually monitored plan to produce in that person specific competencies to enable them to obtain and hold that particular job. And all of it would be driven by the interplay among assessment, instruction, testing and replanning.

While the residual effects of this philosophy are still to be found, notably in some adult classroom training programs developing employees for specific occupations,

this occupationally specific movement has by and large given way to a focus on more general, usually educational, competency achievements by youth and adult participants alike. In the adult training system, the JTPA performance standards have focused on measuring outcomes such as job placement and cost and have thus tended to displace concern with occupationally specific benchmarking. However, the tide may be turning in this area; the above-cited 1989 JTPA National Advisory Committee report has recently called for adding "intermediate competency measures" in order to "more effectively support basic skills remediation for adults."

Meanwhile in the youth "branch" of the system the discussion of competency based youth employment programming has shifted focus to finding means to measure gains in reading, math, and communication skills and in what the field refers to as "pre-employment skills" and "work maturity". These shifts in focus have meant, practically speaking, a much greater focus on pre-assessment and post-assessment as means of documenting skills resulting from program participation. Not nearly as much progress has been made towards a genuine "benchmarking" approach to interim assessment and program adjustment.

As this shift has occurred, assessment and testing methodologies have also changed. Whereas ten years ago there was a search for the best methods of assessing specific vocational competencies, there is now a much greater focus in the field on looking for the best possible tests of reading and math competency. While some programs, especially those serving high school dropouts and the most disadvantaged

adults, use these instruments for "benchmarking", applying them to interim measurement, most do not. Instead, most program administrators (more than 80% of those we interviewed in 1988) report that they use more informal means of assessment, such as interviews and reports of counselling more instructional staff, to measure in-program gains and rely upon standardized tests or other formal assessment for the beginning and the end.

5.5 Assessing Program Impact and Documenting System Progress

Finally, most JTPA SDAs find themselves aggregating data from pre and post program assessment and testing in order to develop estimates of program impact. While nearly four out of every five SDAs in our survey indicated that they felt comfortable with the combination of pre-tests and post-tests for participant assessment many echoed the reservations of one SDA director who said, "The problem with these reading and math numbers is that people actually believe them. And because the only other numbers we have are job placement and salary numbers, they think that teaching reading and math is all we do and they start judging us the way they would a school. We do so much more, and our clients start so far back, that it's a bit of a political pickle. The dilemma as I see it is that we absolutely need to use these tests to do our job. Only a small part of our job is teaching reading and math, yet that's the only part for which we have believable measures." We need another kind of instrument,

designed by or with practitioners, to use for these purposes". (Brandeis Interview, 1988).

There is enormous emphasis in the field on measuring program effectiveness. The system of performance standards, and the practice of performance contracting have literally swept the JTPA system, driving nearly every SDA to organize its programs and its contracting procedures to meet numerical goals established by the federal Department of Labor. But the measures of accomplishment have focused on job placement, wage gains, and per-person costs almost exclusively, and hardly at all on in-program gains in skills or knowledge. (see Butler, 1988)

But this may change. The increased emphasis on educational skills as part of job training is actually a central development in this field. While there may well be a backlash against "using the job training system as an alternative education system", as one SDA manager put it, in our opinion the trend is irresistible. More and more SDAs are going to be offering or contracting for remedial education services, especially instruction in reading and math. Not only does this development have the implications cited above for system measurement and accountability, but clearly it has big implications for the actual content of instruction and services in the job training system, to say nothing of the present and potential uses of assessment testing. Accordingly, this phenomenon warrants a brief separate discussion.

6.0 A New Development: Education and Educational Testing in Job Training Programs

> **"...Inadequate basic academic skills are intertwined with youth employment and with dropping out of school, out of wedlock parenting, welfare dependency, and decline in workforce productivity growth."**
> **--Gordon Berlin and Andrew Sum, The Ford Foundation, 1988.**

> **"...Young people entering the workforce today need the ability to learn and to adapt to changes in the workplace...the ability to learn will be the essential hallmark of the successful employee."**
> **--Committee for Economic Development, New York City, 1985**

The job training community has hardly been immune to the discussions whirling around changes in demography, poor educational preparation, and the crisis in literacy. Indeed, the emerging consensus about the relationship between literacy skills and economic productivity has found a home in the public policy debates surrounding the Job Training Partnership Act. Not surprisingly, this consensus has begun to have an effect on the program services delivered under JTPA and on the way in which testing and assessment methodologies are used and applied. When the General Accounting Office surveyed JTPA SDAs in 1986, 57% reported offering basic skills for mediation in at least some of their programs. The telephone interviews conducted by Brandeis and the Center for Remediation Design in mid-1987, found that virtually every SDA provided at least some educational remediation in their programs, 28% during summer programs only and nearly 70% in both summer and school year activities for young people.

The spread of basic skills instruction throughout the JTPA system has been spurred by the increasingly powerful message (by now, oft repeated) that the ability to read, write and compute effectively is an essential requirement for employment. Moreover, an unacceptably large proportion of the disadvantaged young people have failed to develop those skills in traditional classroom situations, both in training programs and in schools. It is no coincidence that the movement has also been spurred through re-stated congressional mandate in the form of amendments to the legislation and armtwisting of DOL administrators.

But in responding to this challenge many JTPA administrators and planners are moving onto new ground. They are learning as they go, making decisions about program design, curriculum development, testing and assessment, selection of contractors and coordination with educational institutions to an unprecedented extent.

Having said this, we must also note that the penetration of basic skills instruction into job training has been wide but it has not been deep. Whereas nearly every SDA is offering some basic skills remediation, most are offering it for only a handful of youth and adults. Thus, while nearly a hundred percent of SDAs are offering some remediation, the GAO reported that in 1986 only 8% of summer participants received educational services.

This is another area where favorable changes appear to be occurring. Thus by our 1987 survey the number had grown to 20%. Responding to the mandate of the US Department of Labor for the summer of 1988 the number of summer participants

who have received some basic skills educational remediation had grown to nearly half.

A similar pattern appears to hold for the one million or so youth and adult participants in the main year-round JTPA training program. Both word of mouth reports and responses to our non-scientific 1988 survey suggest that a much smaller share, certainly less than 10%, are participating in education programs as part of their job training. Nonetheless, it also seems clear that proportion is growing. As one SDA respondent put it, "you can't believe how much pressure we get from the private sector members of our Private Industry Council to teach people how to read. Our PIC is divided into two camps: one says train 'em fast and get them into a job. The other one says if you haven't taught them how to read you haven't done anything and I don't want to hire them." (Brandeis Interview, 1988)

We will not here repeat the arguments for and against JTPA's involvement in basic skills instruction or the prescriptions for better programming, which tempt us. Suffice it to say again that this is a major trend in this field, one which bears watching closely in the next few years. This trend towards basic skills education in job training began in the youth program side of JTPA, finding its policy roots in the work of the Vice President's Task Force on Youth Employment in the waning years of the Carter Administration, and surviving the JTPA wars to re-emerge with the national push for improved education. It is part of a larger shift, from job placement to job preparation. While that may seem a too-obvious distinction, we believe it is fair to observe that JTPA's first several years have emphasized placement over preparation, seen in its

emphasis on placement - driven performance standards, short duration of training programs, and patterns of client selection. Gradually, the shift to preparation is seen in longer programs, more use of assessment to plan program services, and in the introduction of services designed to develop basic educational skills.

Why is this important for testing and assessment policy? First, because it puts formal testing squarely in the middle of employment and training developments. Here is a set of tools (standardized tests) developed generally for school based programs. Now practitioners in employment and training are being asked for information which can only be generated by standardized tests. Can they use the ones they have? Can they adapts others? Do they need their own special test? As employment and training practitioners expand their use of testing in an effort to assess and document employment - related basic skills, they are beginning to see how complex that set of questions really is. Current trends suggest that new instruments will be needed. At the same time, as the use of testing expands, it highlights the need for better (any, in many cases) staff training in selection and use of assessment to assure they produce consistent and appropriate results.

Nor is this a trivial set of developments, stuck away in some obscure program corner. There are potentially lots of people involved. More than a million youth and adults in training programs are potential beneficiaries or victims of good applications of standardized tests and both formal and informal assessment by other means. And another 750,000 or so young people may be tested as part of their participation in

summer programs. As a consequence, what happens in JTPA with testing may teach us a great deal about the relevance of testing to educational practice with a set of disadvantaged clients. JTPA participants are almost all officially poor, most are minority and urban and therefore likely to be educationally as well as economically disadvantaged. As this set of programs shifts from job placement to more straightforward education and training, it is likely that the use of testing in programs designed for this population may yield fruitful insights both for education and for testing.

7.0 Use of Formal Testing Instruments in JTPA

Decisions about which forms of assessment to use are made by more than 600 relatively autonomous JTPA Service Delivery Areas. As a result, it is not surprising that there is a wide variation in the extent to which they use formal testing instruments, and the specific instruments that they choose to employ. The 1987 survey provides some insights into the choices which were made at that time (and which are probably still being made today.)[3] Highlights of the study include:

- 92% of the respondents reported using at least one standardized test.
- Those SDAs that choose to use "off the shelf" standardized tests have tended to utilize one or more of four tests:
  - 39.3% used the Tests of Adult Basic Education (TABE);
  - 22.7% used the (CAT)
  - 16.7% used the (WRAT)
  - 9.3% used the (ABLE)
  - No other test was used by more than 2.9% of the sample
- Roughly one in fourteen SDAs (7.3%) developed their own tests for these purposes.
- In general, SDAs tended to supplement their standardized tests with other information, either outside sources such as the schools, or judgments derived from the intake interview.

[3] It should be recalled that this survey was based on a probability sample and its results can therefore be generalized with a reasonable degree of certainty.

Testing professionals within the JTPA system are becoming increasingly aware of shortcomings of standardized tests such as the above-cited ones as opposed to criterion- or competency-referenced tests such as the Comprehensive Adult Student Assessment System (CASAS). Agreeing, the JTPA Advisory Committee suggested that the development of criterion-referenced tests for the field ought to be a high priority.

8.0 Conclusions about Assessment and Testing in JTPA

As noted above, the more than 600 Service Delivery Area agencies that deliver JTPA services differ widely in the degree to which they use objective testing and the degree of sophistication that they use in interpreting the results. But taken as a whole, the JTPA system has moved a good distance in coming to understand the uses and misuses of standardized testing. The conclusions that can be drawn are four-fold:

- When over-used, or mis-used, objective tests can be counterproductive.
- When properly used, objective tests can be a useful complement to professional judgments of well trained staff.
- It is impossible for objective tests to be properly used without appropriate training for those who select and administer them as well as those who must interpret the results to make decisions. And not enough training is being done presently.
- More can be done to develop and validate the kinds of tests that are feasible for agencies with limited budgets to use.

8.1 Shortcomings of Objective Tests

JTPA practitioners report that they have become increasingly aware of the shortcomings of standardized tests such as the potential for language or cultural biases that are especially relevant to many of the applicants for and clients in their programs, While this challenge exists for all of JTPA's largely poor population, the problems of Hispanic clients who are illiterate in English or Spanish or both have proven to be especially vexing to SDAs who want to serve them but have neither testing nor instructional materials in Spanish, and very few well-prepared staff to serve such clients. (Brandeis interviews, 1988), though CASAS is developing an employment-related ESL assessment and curriculum management system for use in JTPA.

The awareness of the limitations of testing extends beyond cultural bias issues to its general utility. This view is exemplified by other responses to our 1988 survey. Here is a smattering of comments:

> "Testing is only one aspect of a properly done assessment."
>
> "Testing as we know it just does not adequately measure the variables that are most important to us in JTPA, like motivation and things that employers really care about -- work ethic and reliability".
>
> "The tests that are now available are too narrowly focused. They can't look at the broader picture and don't capture the broader side of people".
>
> "The tests that we are able to administer are not thorough enough to give a really good picture of the client and his or her needs and potentials. At best they are only a partial picture. I'm lots more impressed by the usefulness of a good intake interview than by the results of reading or vocational skills tests".
>
> "There are too many intangibles in this business to expect to capture the important stuff with tests. It is difficult to categorize human beings with different developmental rates".

"Tests can be useful, but other things can be even more important to counselors such as clients' interests and personal interactions with the client. But most of the real decisions are made by other things -- the number of slots available and/or funding left in specific training courses".

At least a few respondents to our survey were even stronger in their skepticism. Five of those we interviewed seemed to agree with one of their colleagues who said, "I'm trying with all my power to resist doing any testing at all. I think it's all gone too far, and I want to keep at least one aspect of my clients' lives free from measurement -- I'm losing, but I'll go down swinging". (Brandeis interviews, 1988).

8.2 Combining Objective Tests and Professional Judgement

This awareness of both the value and the shortcomings of objective tests has been translated into a new appreciation of the utility of combining tests results with other forms of assessment. The JTPA experience has thus made it clear -- to practitioners and to us -- that formal testing should be seen as a worthwhile complement to professional judgments of well trained staff, not a replacement for them. JTPA testing professionals have concluded that no single objective test or battery of tests can provide a perfectly valid measure of deficiencies in education and/or job readiness; given this situation it would be unreasonable to place total dependence on such measures. Indeed, it is hard to imagine that any other field would responsibly come to a far different conclusion.

These opinions are echoed in many of the comments offered by SDA respondents to our 1988 survey:

> "Tests do a reasonable job of both screening and matching if they're combined with solid counseling to back up their interpretation".
>
> "A combination of testing, school results, and interview data is helpful in determining which program clients go to and which services they get".
>
> "If a client is willing to go through a barrage of tests, more information will be available that can contribute to more accurate service". (emphasis added)

8.3 Resource Requirements

In many cases, JTPA staff have tended to underestimate the amount of time and resources necessary to properly utilize objective tests. The SDA respondents to our 1988 survey repeatedly expressed frustration over the fact that the tests that they wanted to use were too expensive, required more staff time than was available, required a better trained staff than was feasible, and were excessively complicated and time consuming. For example, we were told that:

> "I wish we would find an assessment tool to more accurately capture what the client can do in less time".

and,

> "Explaining test results and what they really mean for a client's future can take days".

This growing realism about the proper utilization of tests in the JTPA system is a positive sign, but no easy answers to the challenges have emerged at a time when budgets for federally-funded programs are being squeezed increasingly tightly. There is

clearly a market for tests that can provide useful guidance with minimal resource requirements but little certainty about when or how it will be met.

8.4 Training

There is a dawning awareness among JTPA Service Delivery Areas and their subcontractors that it is not enough to have the best tests and sufficient staff to administer them. Staff must be well trained in the theories that underlie specific tests, the ways that they should be administered, and (perhaps most importantly) the kinds of conclusions that can (and cannot) be made in interpreting test results. This point was most succinctly made by a 1988 survey respondent who said:

> "Our staff people are not professional testers. They don't know enough to make full use of the tests that we do use. I'm worried that we'll go through a rote exercise to comply with someone's notion that testing is useful, and either not understand how to give the test or how to use what we are supposed to be learning from it".

Training has also contributed to some of the insights about proper use and misuse of tests that we have already discussed. For example, several SDA officials agreed with the spirit of one of their colleagues' comments:

> "As a result of training, our staff now place less reliance on raw testing data, and more on competency-based and interview-based assessments. This combination of factors results in better decisions as to who gets into the program and better referrals within the program. It results in better client decisions about what they can hope to do, and better provider decisions about what they can hope to accomplish with the clients...
>
> "People in the system who are not educators or otherwise trained in testing want to document everything. They tend to push for too much standardization rather than using professional judgment...

"The argument that testing can be helpful in running a JTPA program assumes and prays that administrators and instructors how to use assessment and are doing it properly".

Finally SDA administrators are becoming increasingly sophisticated about the need for training in how they can assess the variety of available tests and decide which ones are most appropriate for their clients. As one of them told us:

"We are still struggling to develop appropriate tests and measurement devices. I'm not sure that there is a good enough body of knowledge developed yet, though I think we're getting there".

8.5 Need for More Research, Development, and Validation

While aware of potential shortcomings, most SDAs with whom we spoke felt more or less satisfied with the tests that they were using, or at least unconvinced that there were any better alternatives. The epitome of this point of view is the SDA official who said, "The tests we use are okay--we think."

Despite this point of view, it goes without saying that as the uses of assessment in JTPA are growing, more attention needs to be paid to efforts to develop, validate, and promote the utilization of improved assessment methodologies that are both valid and easy to employ and interpret. As noted in the 1989 JTPA Advisory Committee report:

The ongoing effort to develop and implement national assessment tools and standards should be supported with substantial technical assistance from the federal level.

This does not mean that we can ever expect researchers to come up with a single test that all JTPA managers will be able to employ for all purposes. As noted in Morris, Strumpf, and Curnan (1988):

> There is not one best test. Assessment is an ongoing process and as such is as much an art as a science--no perfect or complete strategy exists. Many variables affect the test selection aspect of the assessment process: the target groups, the participant outcomes expected, the amount and type of existing assessment information available, and the amount of dollars available. What is best for the needs of one program and client group may not be as effective for another.

As is true in some many other aspects of employment and training, what we really need is research and development to help us understand what kinds of tests work best for whom under what circumstances.

8.6 Limitations

Lastly, while many JTPA practitioners are becoming more sophisticated about testing issues, most are still confused about the basic purposes of assessment and testing and its appropriate use. In part this is explained by history -- they are in the testing business because of requirements of regulation and because of the need to document performance of contracts and of local systems -- "we do pre and post testing because the regs require it to claim competency attainment in our performance standard reports"... Likewise, "we test summer kids because it's required, but the program is up and down so quick it never affects what we do with them. We don't see the point of this much hassle for this little gain...". It is not, therefore, surprising that

often inappropriate tests are used, or (maybe worse), that tests are given and little use is made of the results.

At the same time, rapid introduction of practitioners to the world of testing has led to what may be an over-concern about the precision of tests themselves. Too often the questions of "what is the best test" reflects a search for an elusive perfect source of information. In this field, the real purpose of assessment is to help locate appropriate starting points for young people and adults being tested, and to serve as practical tools of measuring progress toward employability. They need to be treated as practical tools rather than as arbiters of some objective truth. Ironically, used that way, tests also become better documentary devices for program progress when individual progress data are aggregated. Driven by the outcome motive alone, it may be that the real integration of information into client sorting, program planning, and progress mapping may be an elusive goal. Which would be sad, for these are likely the most important uses of testing and assessment in this field.

9.0 Implications for Other Fields

Is the case of JTPA unique? We don't think so. As we see it, JTPA provides clear insights into the strengths and weaknesses of the use of standardized tests for assessment purposes in our society because the program encompasses both education-related and job-related criteria and measures. The JTPA lessons about the need to be alert to misuse of objective tests, using objective tests to complement--and not replace--the professional judgments of well-trained staff, the need to develop tests that are valid and feasible to use, and the need to train staff to use tests properly are clearly relevant to all efforts to assess educational achievement and job readiness. And we wouldn't be surprised if their relevance extends far beyond that.

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